

**Notice of Allowability**

Application No.

09/942,833

Examiner

Thai Phan

Applicant(s)

COURTNEY, MIKE

Art Unit

2128

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's interview on Nov. 18, 2006.
2. ☒ The allowed claim(s) is/are 1,4-9,24,26-29 and 31-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

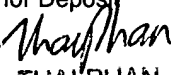
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
THAI PHAN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100

### DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with the attorney of record on Nov. 11/18/2006.

2. In the claims, please amend the claims as follows:

Claim 1. A method for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration commands, the method comprising:

determining a characteristic of the network device, wherein determining the characteristic of the network device comprises determining one of a network device manufacturer, network device model, and network device operating system version;

retrieving a representation of a configuration schema, the representation of a configuration schema corresponding to the determined characteristic of the network device, wherein the representation of the configuration schema comprises a plurality of schema portions and wherein retrieving the representation of the configuration schema comprises:

retrieving an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys; wherein each of the

Art Unit: 2128

plurality of keys is associated with a corresponding one of the plurality of schema portions; and

retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and

generating an XML object corresponding to the retrieved configuration command; wherein the XML object is generated according to at least a portion of the retrieved representation of the configuration schema.

Claim 2. (cancelled)

Claim 3. (Cancelled)

Claim 4. The method of claim 3- 1, wherein retrieving the intermediate representation of the configuration schema comprises:

retrieving a hash table.

Claim 5. The method of claim 3 1, further comprising:

generating a look-up key for the retrieved configuration command.

Claim 6. The method of claim 5, further comprising:

identifying a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key; and

Art Unit: 2128

retrieving a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys;

wherein the XML object is generated according to the first of the plurality of schema portions.

Claim 7. The method of claim 1, further comprising:  
converting the XML object to an XML document.

Claim 8. The method of claim 7, further comprising:  
converting the XML document into a document object model (DOM).

Claim 9. The method of claim 8, further comprising:  
verifying the DOM against the at least the representation of the  
configuration schema.

Claims 10-23 (Cancelled).

Claim 24. A method for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration commands, the method comprising:

determining a characteristic of the network device, wherein determining the

Art Unit: 2128

characteristic of the network device comprises determining one of a network device manufacturer, network device model, and network device operating system version;

retrieving a representation of a configuration schema, the representation of a configuration schema corresponding to the determined characteristic of the network device, wherein the representation of the configuration schema comprises a plurality of schema portions and wherein retrieving the representation of the configuration schema comprises:

retrieving an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys; wherein each of the plurality of keys is associated with a corresponding one of the plurality of schema portions; and

retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and

generating a standard-format representation of the retrieved configuration command; wherein the standard-format representation is generated according to at least a portion of the retrieved representation of the configuration schema.

Claim 25. (Cancelled).

Claim 26. The method of claim 25 24, further comprising:

generating a look-up key for the retrieved configuration command.

Claim 27. The method of claim 26, further comprising:

Art Unit: 2128

identifying a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key; and retrieving a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys; wherein the standard-format representation is generated according to the first of the plurality of schema portions.

Claim 28. The method of claim 24, wherein the standard-format representation comprises an XML object.

Claim 29. A system for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration commands, the system comprising:

- a processor;
- a storage device connected to the processor; and
- a plurality of instructions stored on the storage device, the plurality of instructions configured to cause the processor to:
  - determine a characteristic of the network device, wherein the instructions configured to determine the characteristic of the network device comprise instructions configured to determine one of a network device manufacturer, network device model, and network device operating system version;
  - retrieve representation of a configuration schema, the representation of a configuration schema corresponding to the determined characteristic of the network device, wherein

Art Unit: 2128

the representation of the configuration schema comprises a plurality of schema portions and wherein the plurality of instructions to retrieve the representation of the configuration schema include instructions to:

retrieve an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys; wherein each of the plurality of keys is associated with a corresponding one of the plurality of schema portions; and

retrieve a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and generate a standard-format representation of the retrieved configuration command; wherein the standard-format representation is generated according to at least a portion of the retrieved representation of the configuration schema.

Claim 30. (Cancelled)

Claim 31. The system of claim 29, wherein the plurality of instructions are further configured to cause the processor to:

generate a look-up key for the retrieved configuration command.

Claim 32. The system of claim 31, wherein the plurality of instructions are further configured to cause the processor to:

identify a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key;

and retrieve a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys; wherein the standard-format representation is generated according to the first of the plurality of schema portions.

Claim 33. The system of claim 29, wherein the standard-format representation comprises an XML object.

Claim 34. The system of claim 31, wherein the plurality of instructions are further configured to cause the processor to:

convert the XML object to an XML document.

Claim 35. The system of claim 34, wherein the plurality of instructions are further configured to cause the processor to:

convert the XML document into a document object model (DOM).

Claim 36. The system of claim 35, wherein the plurality of instructions are further configured to cause the processor to:

verify the DOM against the at least the representation of the configuration schema.



Art Unit: 2128

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Phan whose telephone number is 571-272-3783.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nov. 22, 2006

  
THAI PHAN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100